#8

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Medical
Observations,
made during a short period on the
Western coast of Africa,
By
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of
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It is not my intention, in the present paper, to indulge in speculation; but merely to give a faithful detail, of such facts, as fell under my immediate observation; during a short cruise, on the Western coast of Africa, in the rainy season of 1824. As the same ground has been passed over, by Lind, and other distinguished Surgeons of the British Navy; it can scarcely be supposed, with my limited experience that I should be competent to offer, to the consideration of the Faculty, any circumstance of importance, which has not been already spread before the profession, by those minute and faithful observers of nature.

That part of the coast, which lies between the Tropics, has, properly speaking, been divided into two seasons, the Wet, and the Dry. The former is the season of sickness;

Whereas, for many months in the Dry Season, most parts of the coast are remarkably healthy and pleasant.

The Rains have been observed to follow the Sun, in his apparent progress along the coast, from the Southern to the Northern Tropic; and to return in his train, as he retrogrades to the South - They usually commence at Mesurada, (which is situated in 6 Degrees of Northern Latitude) in May; and there, moving slowly onward, arrive at the Cape de Verd Islands, in the month of August; at which time, a remission takes place, at Mesurada, and other places near the Equator.

On the return of the Sun from his Northern tour, the rains recommence at those places, and after continuing for a time, pass over to the South of the Line. The quantity

of water which falls at night, is much greater than at any other period of the 24 hours: During the day, the intense heat of a Vertical Sun, enables the atmosphere, to support its immense load of Vapour, but as soon as its influence is withdrawn in the evening, the rain begins, and falls in torrents through the night.

The heat which we experienced while on the coast, did not exceed 79 degrees; which is much less, (according to common observation) than is indicated by the Thermometer, in the dry season of the year. It is stated by Lind, that at Senegal, (the most Northern extremity of Guinea) in December 1763, the Temperature was 93 degrees, measured by Fahrenheits Thermometer, and 98 at Sierra Leone, when the Sun, had made its most distant retreat, from those places, —

Hence we may in some measure foreign the influence of the rains, in protecting the already heated ground, from the perpendicular Rays of the returning Vertical Sun. — So general is the diffusion of the miasmata, throughout the atmosphere, in the rainy season, that not only those persons, who are on Shore, but even the Crews of Ships, at the distance of some miles from land, feel its influence. — Nor is it confined in its effects to the Human species only; on the contrary, ~~it~~ extends its baneful influence, to many of the inferior orders of Animals. — I was informed by the resident agent of the Colonization Society, that most of the domestic Animals, which have been procured for the use of the Colony, at Mesurada, have fallen victims to the climate.

Strangers, who remain on shore, at this season of the year, are, seriously affected; either with Dysentery, Fevers, Ulcers, or a more general derangement of all the functions of the body. When, I landed, at the little colony, established at Mesurado, I found the aspect of disease, strongly depicted in almost every face. None could be said, to be entirely well; except the Natives, and a few others, whom time, and uncommon strength of Constitution, had inured to the Climate.
Such was the depraved state of the System, that the slightest scratch, or abrasion of the skin, would speedily degenerate, into a foul and malignant Ulcer — This African Ulcer, always, commenced with an obstinate Hemorhage, from the part. When fully developed, it was characterized, by a circular shape, with elevated edges, an ash

coloured surface, interspersed with coagula of blood, and excessive pain, with heat and swelling of the adjacent parts. The local irritation, thus produced, soon extended its influence to the general system, inducing considerable febrile action, as was indicated by the quick hard pulse, dry hot skin, and furred tongue, together with a very great derangement of the digestive organs. – The inhabitants of the colony consider it an incurable disease, though I heard of only one case in which it terminated fatal=ly. In that instance, it attacked the stump of an amputated extremity, and soon its course in a few days. – Three cases of the disease, which have continued for one or two years, (several of which came under my observation) bore their irritable character, and assume that of the ulcer described by Mr. Stone;

as situated in parts, too weak to support a healthy action.

As to the treatment, my experience enables me to say but little. The few cases that occurred on board the Lapee, appeared to be aggravated by Cerates, and all Oily applications. The use of Opium, however, in the form of a plaster to the part, displayed a most salutary influence. It not only alleviated the pain, but changed entirely the character of the disease action. The most effectual remedy, however, was a change of climate. As soon as we left the rains, and fell in with the trade winds, on our passage to the West Indies, the Ulcers all disappeared; and we had no further trouble with them.

The disease, most formidable to strangers, at this season of the year, is the Bilious Remittent Fever. It is always most

malignant at the beginning of the rains, and gradually abates in violence, as the season advances, and the constitution becomes accustomed to the climate – Of the cases of this disease which fell under my observation, three were most violent, which were contracted by imprudent exposure on shore; Out of six persons who thus contracted the disease, two died, and the other four narrowly escaped with life. –

When the disease occurred on board the Vessel, anchored at the distance of 5 miles from land, the attacks were milder, tho' by no means, entirely free from danger.

The disease was, generally, preceded by a mild dysentery of several days duration –

In some cases, however, it made its appearance, without any premonitory symptoms. – A remarkable instance of this kind

was furnished by the case of the gentleman who was sent by the Government of the United States, to enquire into the state of the colony at Mesurado. – In attending to the duties of his Mission, this gentleman found it necessary to remain on shore, six or eight days. When he returned on board the vessel, he was in the most perfect health, and continued so, until the eighth day, after our departure from the coast; when upon, descending hastily the cabin ladder, he made a false step, and to my surprise, notwithstanding the slightness of the shock, he was immediately seized with a severe headache, followed in the course of a few hours, by the most violent febrile symptoms. – In another instance the attack came on more suddenly, in the form of an apoplectic fit. – To these anomalous cases, I may add; that whenever a strong predisposition

to Rheumatism, existed, the fever was for a time, disguised under the character of that disease. —

Though it may be a digression, yet it may not perhaps be altogether irrelevant, to mention here, a very singular circumstance, and, on which, I have had frequent opportunities of witnessing, on visiting unhealthy posts; Namely, that, those persons, who were labouring under stricture of the Urethra, were very apt, to be seized with a complete suppression of Urine; so soon as we arrived at those places, where the atmosphere was much contaminated. This is a very curious Phenomenon, and illustrates two points; first the extensive influence, which the morbid cause exerts over the system, and secondly, the great tendency of diseased action, to spend its force, on the weakest part of the body).

The fever was generally ushered in, by a mild febrile chill; When fully developed, it was characterized by the following symptoms; a quick, full, and strong pulse; hot skin, flush in face; severe headache, furred tongue, slightly tinged with yellow; irritable stomach, excessive thirst, obstinate constipation; pain in the abdomen, and in the right side of the chest; soreness of the throat, cough; and the expectoration of thick viscid matter. The remissions were very irregular in their recurrence; generally, however, they occurred in the morning.

The perspiration, incident to this stage, was so profuse, as to be regarded among the most formidable circumstances attendant on the disease.

To the symptoms which have been already enumerated, as characterizing this dis-

=case; there were superadded, in one or two cases, several anomalous appearances. In one case there was an eruption of very irritable blotches, during the intermission, which was the cause of great inquietude to the patient. In another, there was a severe pain in the Testicles, and in the progress of the case, the scrotum, contracted firmly, assumed a dark colour, and was marked with deep Rhagades on its surface.

If not checked by the remedial agents, employed for its removal, the disease in the course of three or four days, assumed a Typhoid character, when the skin, and eyes became yellow, the extremities cold, and the pulse small quick and feeble.

If there were superadded, in several cases, the most alarming symptoms; such as, black tongue, coma, delirium, petechiæ, and involuntary discharges of Faces and Urine. Usually

on the sixth or seventh day, the disease came to a crisis, which was announced, in every instance by an expectoration of florid frothy blood.

It would appear from this circumstance combined with several of the symptoms, mentioned, in the general character of the disease, that there must have been an inflammatory affection of the lungs, associated with the fever. - This was owing, perhaps, to a strong predisposition to pneumonia, which existed at the time, it having been the prevailing disease on board the Bessel, until we reached the coast; and soon after we left the rains, it returned, and became predominant. -

The treatment of the early stage of this disease consisted principally in blood letting, and purging. In some instances, blood was abstracted at once, to the amount of 20 or 30 ounces - This large bleeding generally effected all that

the lancet was capable of performing; and indeed so strong was the tendency to Typhus, in most instances, that it would have been highly imprudent, to repeat the operation. We therefore trusted to other modes of evacuation, far more safe, and perhaps more efficient, for the further reduction of excitement, and vascular action: At the head of these, Purgatives, stand conspicuous; they were called for by many indications, and employed with no sparing hand.

We at first, resorted to the most active articles; such as, Calomel, Gamboge, and Jalap, in various states of combination, and these were assisted in their operation, by the, Oleum Ricini, or divided doses of some of the Neutral Salts; as also by injections, the best materials for which, were always found ready at hand, without the trouble of preparation; I allude of course to, common sea water, diluted, immi=

-diately from the Ocean, and used pro re nata.

The bowels having been well evacuated, and the violence of the excitement subduced; we had recourse, with much advantage, to some of the milder Diaphoretic Medicines; such as the Spiritus Mindererii, or small doses of the Tartrate of Antimony, either alone, or in combination, with Calomel, and Nitrate of Potassa.

The irritable state of the Stomach in several cases, was found to be a serious impediment to the administration of Medicines. To correct this, a variety of the usual remedies, were put in requisition. Nothing, however, made the least impression upon the symptoms, except a strong infusion of Virginia Snake Root. This, given in the dose of a wine glass full, and repeated, as often as, the urgency of the symptoms, demanded, acted like

a charm, not only composing the stomach, but checking the profuse perspiration, incident to the semipiors. Unaided by the use of this invaluable medicine, we should have found ourselves, totally incompetent, to the management of these cases.

Emetics were used in one or two instances; but as no good effect seemed to result, they were abandoned.

Mercury, which has a high reputation, in the treatment of almost all, Tropical diseases; was soon called to our assistance; and from the liberal manner, in which it was used; we soon had several cases, under its full influence. Our highly wrought anticipations of success, from the employment of this Medicine, were, however, by no means realised; no case was improved by it; and some were evidently made worse; it was therefore thrown

aside, as not merely useless, but injurious.

After the use of the more directly depleting measures, Blisters were employed with effect, in removing the severe pain in the side.

Bark was administered, in a variety of forms; but no benefit resulted from its use, until the force of the disease was broken, and the patient evidently convalescent.

There was nothing peculiar in the treatment of the second, or Typhoid stage of the disease. He generally, commenced with the Carbonate of Ammonia, in the form of the Volatile Julep, and followed it up, with Wine, Brandy, and other more powerful stimulants, as the exigency of the case demanded. —

Blisters to the head, and extremities, when the brain was much affected, were very efficacious. —

Convalescence was observed to be uncommonly slow – Long after the force of the disease was subdued, the patients continued in a lingering state of health. Most of them were affected with a pain in the right side, numbness of the inferior extremities, alternatous swellings of the feet and ankles; and more or less derangement of the digestive Organs.

There was in every instance, a very great susceptibility to morbid impressions. This was evinced so strongly, that I could by its means, test the purity of the atmosphere of the different places, we visited in the West India Islands: In proof of this remark, I may state, that, at the time we arrived at the Island of Saint Thomas, the convalescents were walking about the deck, but we had not been in port more than 24 hours, before they were all confined to their

births, with symptoms of violent fever.— The same thing occurred in the Havana, and again in Matanzas.— It was remarked in every instance, that the condition of the sick, was much improved after putting to sea.—

These lingering cases were found exceedingly difficult to manage, in the hot climate of the West Indies. Purging, antimonials, and Mercury, proved alike ineffectual and a favorable opportunity presenting itself, the afflicted, were returned to the United States, under the impression, that a change of climate, might accomplish, that, which Medicine, had been found incompetent to effect.

This brings to a conclusion, the principal observations, which I have been able to make, on those diseases, which came under my immediate notice, on

the Western coast of Africa.

Imperfect as they are, I submit them, to the enlightened wisdom of the Faculty.